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Shrader et al.

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(54) **REFRIGERATOR, INSULATED DOOR MOUNTED ON AN INSULATED CABINET OF A REFRIGERATOR, AND ARTICLE DISPENSER FOR MOUNTING WITHIN ONE OR MORE RECESSES OF AN INNER WALL OF A REFRIGERATOR DOOR**

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A47F 1/08	(2006.01)

(52) **U.S. Cl.**

CPC . ***F25D 23/02*** (2013.01); ***A47F 1/08*** (2013.01); ***F25D 23/04*** (2013.01); *F25D 2331/805* (2013.01)

(58) **Field of Classification Search**

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See application file for complete search history.

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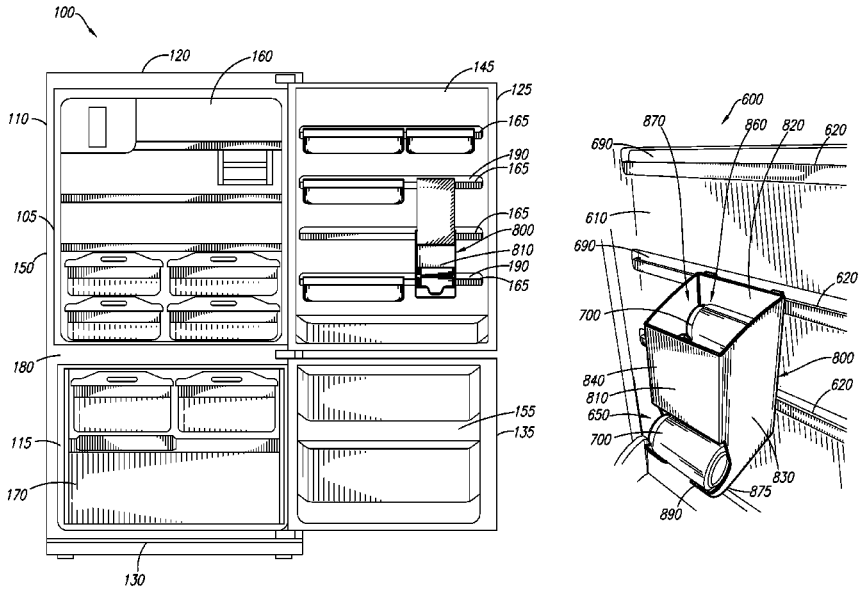
(57) **ABSTRACT**

A refrigerator may include an insulated cabinet configured to preserve food, an insulated door mounted on the insulated cabinet, the insulated door being configured to close the insulated cabinet, the insulated door including an inner wall, the inner wall including one or more recesses, and an article dispenser including a dispensing portion and a mounting portion on a back side of the dispensing portion, the mounting portion being configured to removably mount the dispensing portion within the recesses, the dispensing portion being configured to store one or more articles and dispense the articles according to a user's demand.

16 Claims, 5 Drawing Sheets



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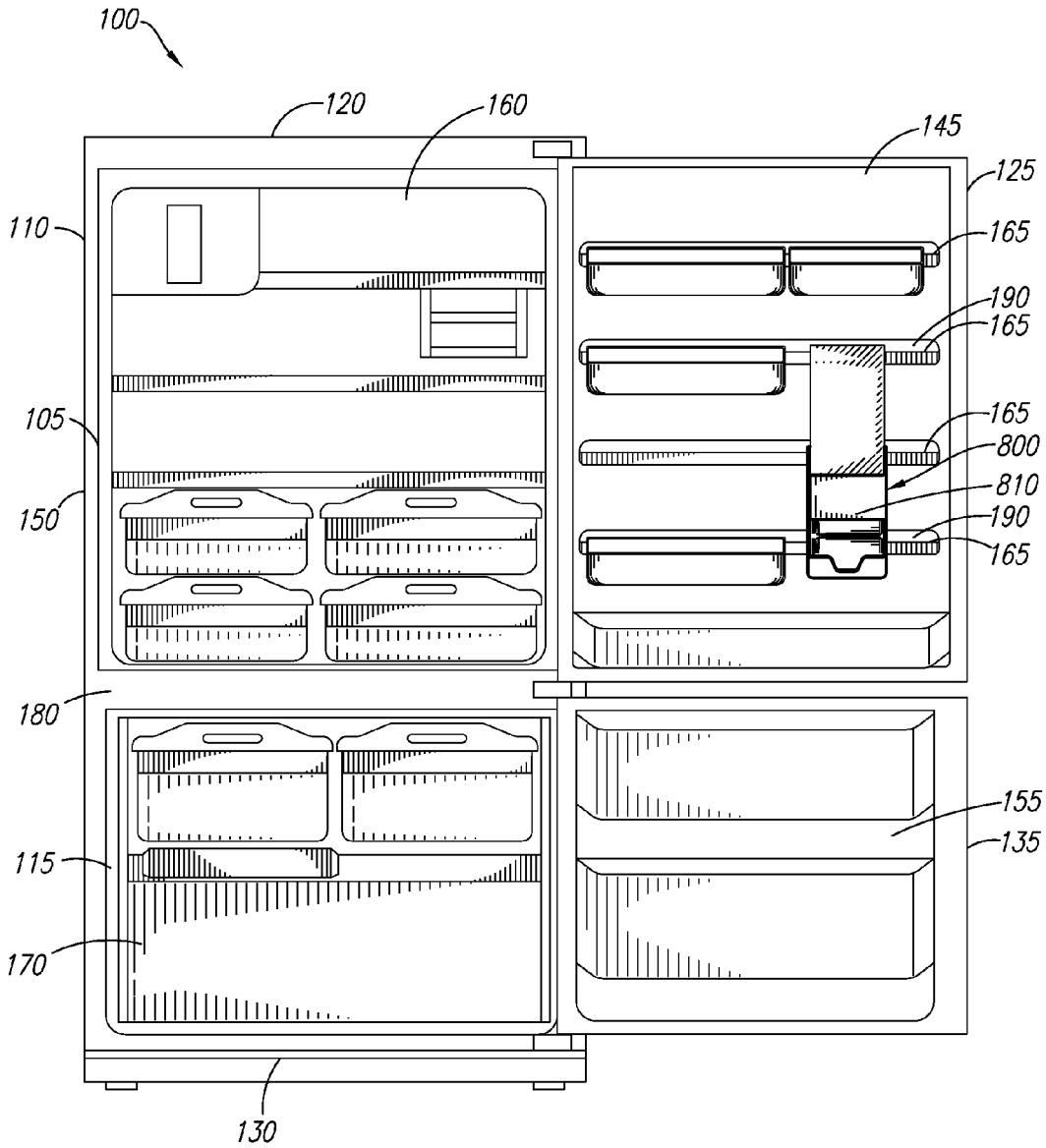
100
120
160
145
125
110
165
190
165
105
165
800
810
150
190
165
180
155
135
115
170
130

FIG. 1

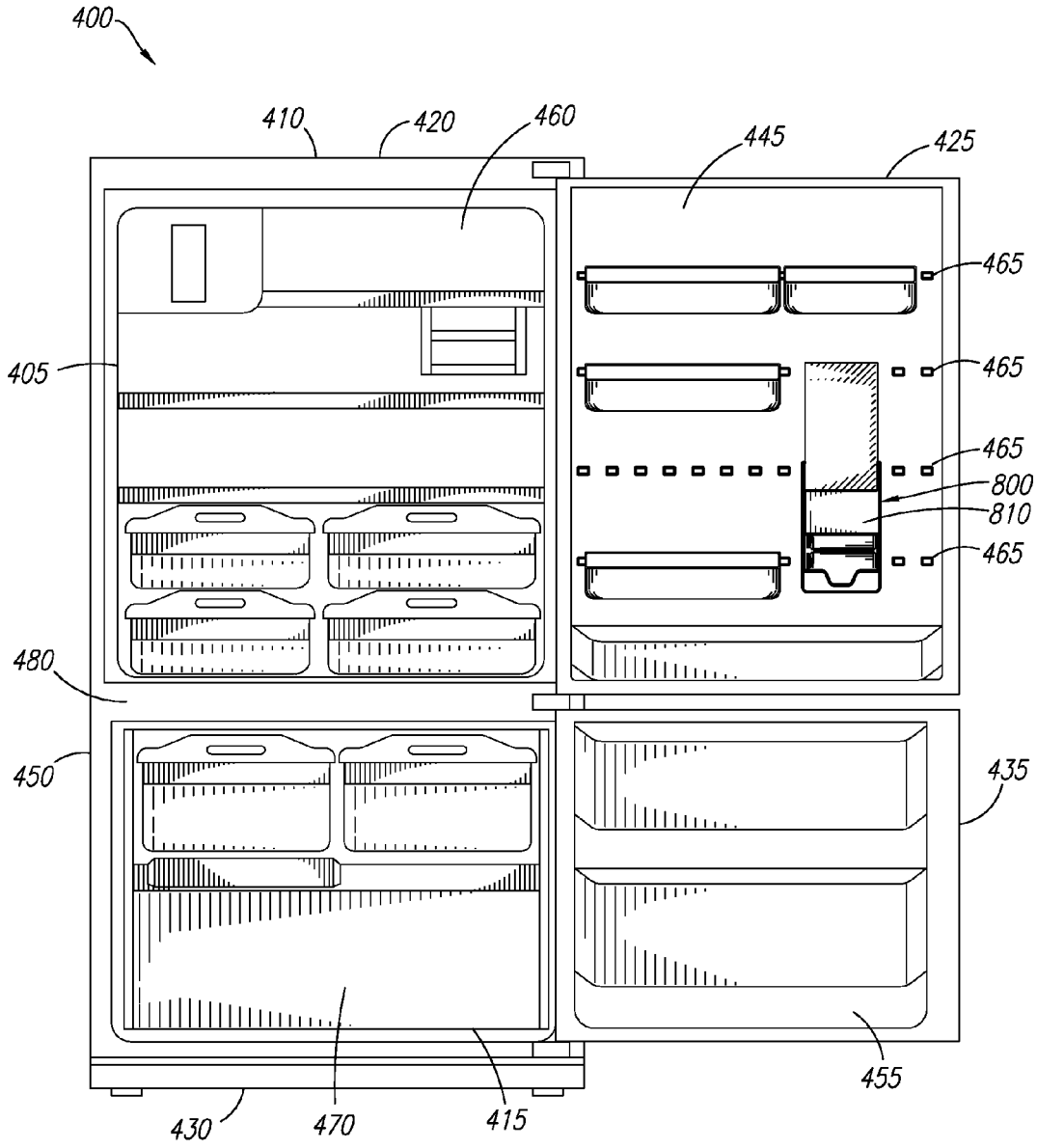
400
410
420
460
445
425
465
405
465
465
800
810
465
480
450
435
455
430
470
415

FIG. 2

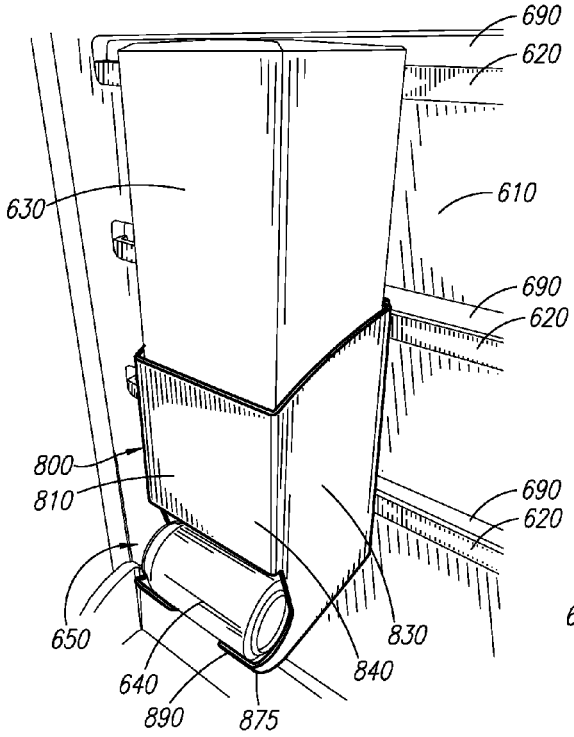
690
620
630
610
690
620
800
810
690
620
650
830
640
840
890
875

FIG. 3

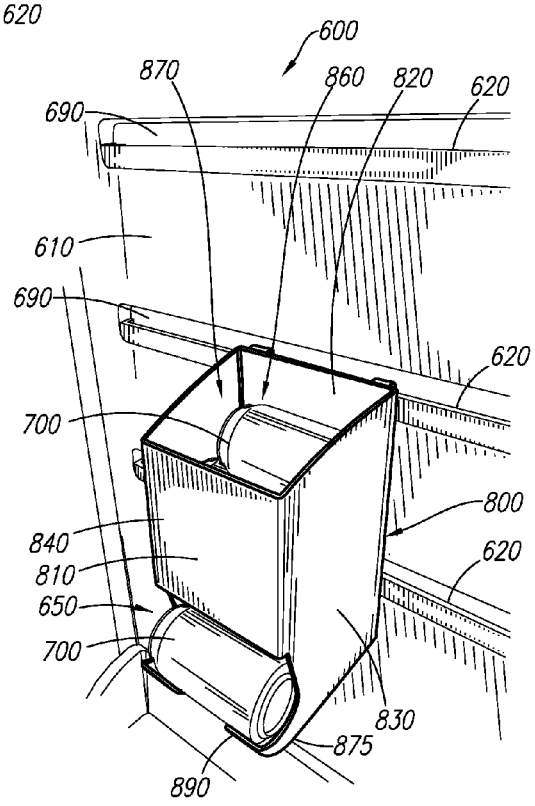
600
870
860
820
620
690
610
690
620
700
800
840
620
810
650
700
830
875
890

FIG. 4

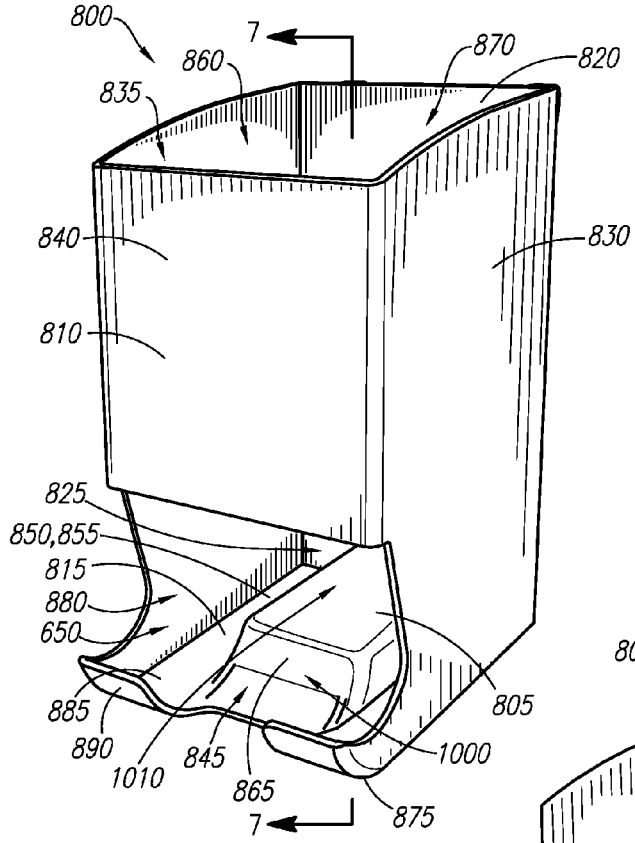
800
7
860
870
820
835
840
830
810
825
850,855
815
880
650
885
890
1010
845
865
805
1000
875
7

FIG. 5

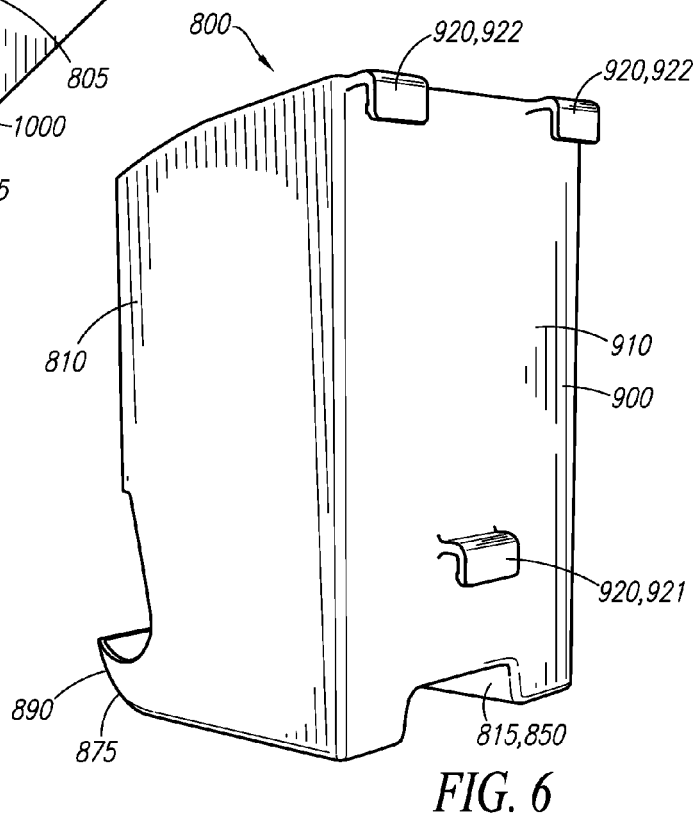
800
920,922
920,922
810
910
900
920,921
890
875
815,850

FIG. 6

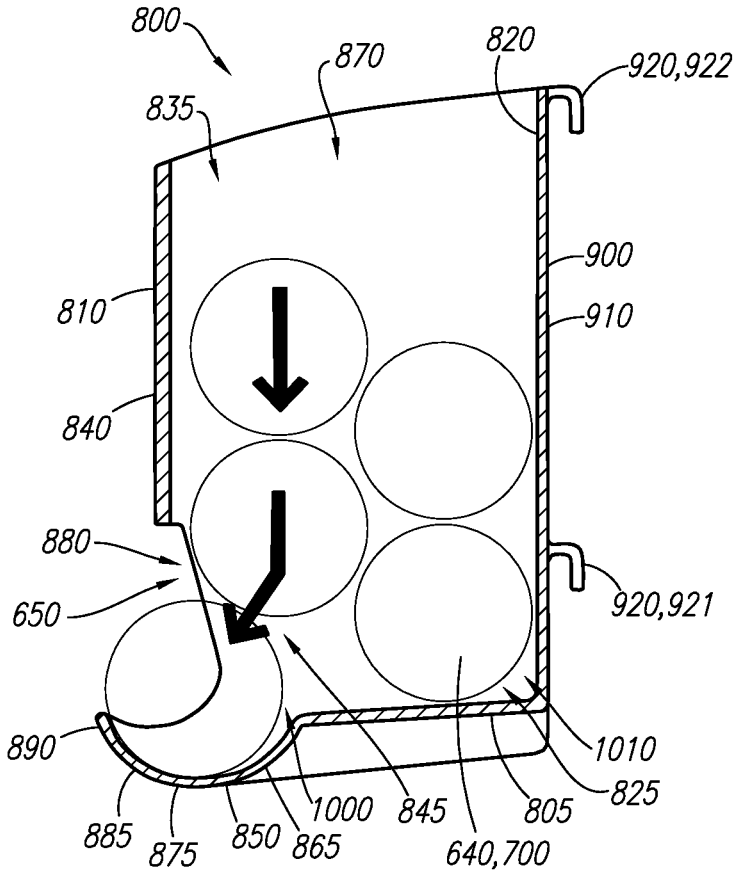
800
870
820
920,922
835
900
910
810
840
880
650
920,921
890
1010
825
805
1000
845
885
875
850
865
640,700

FIG. 7

REFRIGERATOR, INSULATED DOOR MOUNTED ON AN INSULATED CABINET OF A REFRIGERATOR, AND ARTICLE DISPENSER FOR MOUNTING WITHIN ONE OR MORE RECESSES OF AN INNER WALL OF A REFRIGERATOR DOOR

BACKGROUND

1. Field

The following description relates to a refrigerator, an insulated door mounted on an insulated cabinet of a refrigerator, and an article dispenser for mounting within one or more recesses of an inner wall of a refrigerator door.

2. Description of Related Art

Storage bins and racks are provided in refrigerators and freezers in order to maximize the storage space thereof. Occasionally, storage bins and racks are designed to have specific purposes, such as being devoted to small dairy products, two-liter beverages, or milk jugs. Some storage bins and racks are also occasionally designed to perform particular functions, such as the chilling of particular beverages at an accelerated rate or the maintaining of certain articles in protective orientations or positions contributing to ease of accessibility.

SUMMARY

In one general aspect, a refrigerator may include an insulated cabinet configured to preserve food, an insulated door mounted on the insulated cabinet, the insulated door being configured to close the insulated cabinet, the insulated door including an inner wall, the inner wall including one or more recesses, and an article dispenser including a dispensing portion and a mounting portion on a back side of the dispensing portion, the mounting portion being configured to removably mount the dispensing portion within the recesses, the dispensing portion being configured to store one or more articles and dispense the articles according to a user's demand.

In another general aspect, an insulated door mounted on an insulated cabinet of a refrigerator may be provided. The insulated door may include an inner wall including one or more recesses, and an article dispenser including a dispensing portion and a mounting portion on a back side of the dispensing portion, the mounting portion being configured to removably mount the dispensing portion within the recesses, the dispensing portion being configured to store one or more articles and dispense the articles according to a user's demand to close the insulated cabinet.

An article dispenser may be on an inner wall of the insulated door, the dispenser including a dispensing portion and a mounting portion on a back side of the dispensing portion, the dispensing portion being configured to store one or more articles and dispense the articles according to a user's demand, the mounting portion being configured to removably mount the dispensing portion within one or more recesses in the inner wall.

The mounting portion may be further configured to enable the article dispenser to slide horizontally within the recesses in the inner wall.

The opening of each of the recesses may be partially defined by a rail that, along with the recess, extends horizontally across a substantial width of the inner wall. The mounting portion may include one or more mounting members, the mounting members being configured to rest and slide on the horizontal rails corresponding with the one or more recesses within which the mounting members are removably mounted, the mounting members being further configured to extend past the corresponding horizontal rails into the recesses.

The mounting members may include curved fasteners.

A first plurality of the mounting members may be slidably and removably mounted in a first one of the recesses. A second plurality of the mounting members may be slidably and removably mounted in a second one of the recesses located below and adjacent to the first one of the recesses.

An opening of each of the recesses may be defined by a hole in the inner wall. A plurality of the holes may extend in horizontal rows across a substantial width of the inner wall. The mounting portion may include one or more mounting members, the mounting members being configured to rest on portions of the inner wall corresponding with the holes defining the recesses within which the mounting members are removably mounted, the mounting members being further configured to extend past the corresponding inner wall portions into the recesses.

The mounting members may include hooks.

A first plurality of the mounting members may be removably mounted in a corresponding first plurality of the recesses along a first one of the horizontal rows. A second plurality of the mounting members may be removably mounted in a corresponding second plurality of the recesses along a second one of the horizontal rows, the second one of the horizontal rows being located adjacent to and below the first set of horizontal rows.

In another general aspect, an article dispenser for mounting within one or more recesses of an inner wall of a refrigerator door may be provided. The dispenser may include a dispensing portion configured to store one or more articles and dispense the articles according to a user's demand, and a mounting portion on a back side of the dispensing portion, the mounting portion being configured to removably mount the dispensing portion within the recesses.

The mounting portion may include mounting members extending from the mounting portion that correspond with locations of the recesses.

The mounting members may be configured to rest on horizontal rails defining an opening of the recesses and extend from the horizontal rails into the recesses.

The mounting members may be configured to rest on portions of the inner wall defining an opening of the recesses and extend from the inner wall portions into the recesses.

The mounting members may include a first plurality and a second plurality of the mounting members, the first plurality of the mounting members being slidably and removably mounted in a first one of the recesses, the second plurality of the mounting members being slidably and removably mounted in a second one of the recesses located below and adjacent to the first one of the recesses.

The mounting members may include a first plurality and a second plurality of the mounting members, the first plurality of the mounting members being removably mounted in a corresponding first plurality of recesses that extend across a substantial width of the inner wall, the second plurality of the mounting members being removably mounted in a corresponding second plurality of recesses that extend the substantial width of the inner wall and are located adjacent and below the first plurality of recesses.

The dispensing portion may include a bottom wall, a step, and an article dispensing area, the step being elevated from the bottom wall and provided in a rear portion of the dispensing portion, the step being configured to urge articles falling from an upper portion of the dispensing portion into the article holding area to enable retrieval by the user.

The dispensing portion may include a bottom wall, an article holding area extending upwards from the bottom wall, and an article dispensing area extending outwards from the article holding area on the bottom wall, the article holding area being defined by walls configured to surround the articles and store the articles until required by the user's demand, the article dispensing area being configured to hold one of the articles apart from the stored articles for retrieval by the user. The articles may be surrounded and stored in the article holding area may be configured to move toward the bottom wall with a retrieval of the one of the articles from the article dispensing area.

The articles may include a plurality of cylindrical beverage containers.

The cylindrical beverage containers may be separated from surfaces of the article holding area by a carton configured to hold the cylindrical beverage containers.

Other features and aspects may be apparent from the following detailed description, the drawings, and the claims.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a front view illustrating an example of a refrigerator according to an embodiment.

FIG. **2** is a front view illustrating an example of a refrigerator according to an embodiment.

FIG. **3** is a front perspective view illustrating an example of an article dispenser mounted on an inner wall of a refrigerator door according to an embodiment.

FIG. **4** is a front perspective view illustrating an example of an article dispenser mounted on an inner wall of a refrigerator door according to an embodiment.

FIG. **5** is a front perspective view illustrating an example of an article dispenser according to an embodiment.

FIG. **6** is a rear perspective view illustrating an example of an article dispenser according to an embodiment.

FIG. **7** is a sectional view illustrating an example of an article dispenser according to an embodiment.

Throughout the drawings and the detailed description, unless otherwise described, the same drawing reference numerals will be understood to refer to the same elements, features, and structures. The relative size and depiction of these elements may be exaggerated for clarity, illustration, and convenience.

DETAILED DESCRIPTION

Examples incorporating one or more embodiments are described and illustrated in the drawings. These illustrated examples are not intended to be limiting. For example, one or more aspects of an embodiment may be utilized in other embodiments and even other types of devices.

FIG. **1** is a front view illustrating an example of a refrigerator **100** according to an embodiment. FIG. **2** is a front view illustrating an example of a refrigerator **400** according to an embodiment. While refrigerators **100** and **400** are illustrated as being bottom-mount refrigerators, embodiments disclosed herein are not limited thereto. For example, a side-by-side refrigerator, a top-mount refrigerator, a full refrigerator, a cabinet refrigerator, a compact refrigerator, a wine storage refrigerator, or a freezer may be included in the disclosed embodiments.

As is illustrated in FIG. **1**, the refrigerator **100** may include an insulated cabinet **110**. The insulated cabinet **110** may include a top wall **120**, a bottom wall **130**, a rear wall (not shown), side walls **150**, an upper opening **160**, a lower opening **170**, and a mullion **180**. The rear wall may contact the top wall **120**, the bottom wall **130**, the side walls **150**, and the mullion **180**. The side walls **150** may contact the top wall **120**, the bottom wall **130**, and the rear wall. The upper opening **160** may be defined by the top wall **120**, the side walls **150**, the rear wall, and the mullion **180**. The lower opening **170** may be defined by the bottom wall **130**, the rear wall, the side walls **150**, and the mullion **180**.

A fresh food liner **105** may be provided in the upper opening **160**. The fresh food liner **105** may define a fresh food compartment. A freezer liner **115** may be provided in the lower opening **170**. The freezer liner **115** may define a freezer compartment. Both the fresh food compartment **105** and the freezer compartment **115** may include a variety of storage units and shelves for placing items therein or thereon, respectively.

An insulated fresh food door **125** may be configured to close the upper opening **160** corresponding with the fresh food compartment **105**. The fresh food door **125** may face the fresh food compartment **105** when closed. An insulated freezer door **135** may be configured to close the lower opening **170** corresponding with the freezer compartment **115**. The freezer door **135** may face the freezer compartment **115** when closed. Both the fresh food door **125** and the freezer door **135** may include a variety of storage units mounted on inner walls **145** and **155** thereof, respectively.

The inner wall **145** of the fresh food door **125** may include recesses **190** therein. Each of the recesses **190** may stretch across a substantial width of the inner wall **145**. Each of the recesses **190** may occupy the inner wall **145** at a particular height that differs from the other recesses **190**. An opening of each of the recesses **190** within the inner wall **145** may be defined by a portion of the inner wall **145** and a horizontal rail **165** installed at and defining a bottom of the openings. A portion of the inner wall **145** may define sides and a top of the opening of each of the recesses **190**. The recesses **190** may extend into the fresh food door **125** from the openings in the inner wall **145** and behind the horizontal rails **165**. The recesses **190** may be designed to accommodate a variety of mounting configurations of different storage units that would correspond with the recesses **190** and the horizontal rails **165**.

While openings of the recesses **190** are illustrated in FIG. **1** as being partially defined by horizontal rails **165**, embodiments disclosed herein are not limited thereto. For example, the recesses **190** could be defined solely by construction of the inner wall **145**. Further, while it is illustrated in FIG. **1** that the recesses **190** are disposed solely on the inner wall **145** of the fresh food door **125**, embodiments disclosed herein are not limited thereto. For example, the recesses **190** may additionally be included within the inner wall **155** of the freezer door **135**. In addition, the recesses **190** may further be included within the side walls **150** or the rear wall of the insulated cabinet **110**.

An article dispenser **800** may be removably mounted over the horizontal rails **165** and within the recesses **190** in the inner wall **145**. The article dispenser **800** may include a dispensing portion **810** and a mounting portion **900**, which is illustrated in FIGS. **5** and **6**. The dispensing portion **810** may be configured to store various types of articles and dispense them upon demand by a user. The mounting portion **900** may be provided on a back side **910** of the dispensing portion **810**, which is illustrated in FIGS. **5** and **6**.

The mounting of the article dispenser **800** within the recesses **190** by the mounting portion **900** may be achieved using any type of mounting member having a shape that would correspond to a shape of the recesses **190**. For example, as is illustrated in FIGS. **5** and **6**, curved fasteners **920** may be configured to enter the recesses **190** and hang on

the horizontal rails **165** at the opening of the recesses **190** to removably mount the article dispenser **800** to the inner wall **145**. However, embodiments are not limited thereto, as any type of removable curved fastener, such as, but not limited to, anchors, grapples, hangers, or hooks, may be used to mount the article dispenser **800** to the inner wall **145**. Further, both mounting members of the mounting portion **900** and the horizontal rails **165** may additionally be configured to allow the article dispenser **800** to slide along the width of the horizontal rails **165**.

While FIG. **1** illustrates a refrigerator **100** having recesses **190** extending horizontally across a width of the inner wall **145**, embodiments disclosed herein are not limited thereto. For example, as is illustrated in FIG. **2**, the refrigerator **400** may include an insulated cabinet **410**. The insulated cabinet **410** may include a top wall **420**, a bottom wall **430**, a rear wall (not shown), side walls **450**, an upper opening **460**, a lower opening **470**, and a mullion **480**. The rear wall may contact the top wall **420**, the bottom wall **430**, the side walls **450**, and the mullion **480**. The side walls **450** may contact the top wall **420**, the bottom wall **430**, and the rear wall. The upper opening **460** may be defined by the top wall **420**, the side walls **450**, the rear wall, and the mullion **480**. The lower opening **470** may be defined by the bottom wall **430**, the rear wall, the side walls **450**, and the mullion **480**.

A fresh food liner **405** may be provided in the upper opening **460**. The fresh food liner **405** may define a fresh food compartment. A freezer liner **415** may be provided in the lower opening **470**. The freezer liner **415** may define a freezer compartment. Both the fresh food compartment **405** and the freezer compartment **415** may include a variety of storage units and shelves for placing items therein or thereon, respectively.

An insulated fresh food door **425** may be configured to close the upper opening **460** corresponding with the fresh food compartment **405**. The fresh food door **425** may face the fresh food compartment **405** when closed. An insulated freezer door **435** may be configured to close the lower opening **470** corresponding with the freezer compartment **115**. The freezer door **435** may face the freezer compartment **415** when closed. Both the fresh food door **425** and the freezer door **435** may include a variety of storage units mounted on inner walls **445** and **455** thereof, respectively.

The inner wall **445** of the fresh food door **425** may include rows of recesses **465** therein. The rows of the recesses **465** may stretch substantially across a width of the inner wall **445**. However, unlike the recesses **190** of FIG. **1**, the recesses **465** themselves may not extend substantially across the width of the inner wall **445**. A row of recesses **465** may occupy the inner wall **445** at a particular height that differs from all other rows of recesses **465**. An opening of each of the recesses **465** may be defined by the inner wall **445**. The recesses **465** may extend into and behind portions of the inner wall **445** defining openings of the recesses **465**. The recesses **465** may be designed to accommodate a variety of mounting configurations of different storage units that would correspond with the recesses **465**.

While it is illustrated in FIG. **2** that the recesses **465** are disposed solely on the inner wall **445** of the fresh food door **425**, embodiments disclosed herein are not limited thereto. For example, the recesses **465** may additionally be included within the inner wall **455** of the freezer door **435**. Further, the recesses **465** may be included within the side walls **450** and the rear wall of the insulated cabinet **410**.

The article dispenser **800** may be removably mounted to the key-shaped recesses **465**. The mounting within the recesses **465** by the mounting portion **900** may be achieved using any type of mounting member having a shape that would correspond to a shape of the recesses **465**. For example, as is illustrated in FIGS. **5** and **6**, curved fasteners **920** may be configured to enter within the recesses **465** to removably mount the article dispenser **800** to the inner wall **445**. However, embodiments are not limited thereto, as any type of removable curved fastener, such as, but not limited to, anchors, grapples, hangers, or hooks, may be used to mount the article dispenser **800** to the inner wall **445**.

While FIG. **1** describes refrigerator **100** having recesses **190** and FIG. **2** describes refrigerator **400** having recesses **465**, embodiments described herein are not limited thereto. For example, the article dispenser **800** may be affixed to the inner walls **145** and **445** of the fresh food doors **125** and **425** by anything provided thereon or therein that allows the inner walls **145** and **445** of the fresh food doors **125** and **425** to correspond with mounting members **920** of the mounting portion **900** of the article dispenser **800**, such as, but not limited to, hooks, cords, mounted receptacles, pedestals, and knobs.

FIG. **3** is a front perspective view illustrating an example of the article dispenser **800** mounted on an inner wall **610** of a refrigerator door **600** according to an embodiment. FIG. **4** is a front perspective view illustrating an example of the article dispenser **800** mounted on the inner wall **610** of the refrigerator door **600** according to an embodiment. FIG. **5** is a front perspective view illustrating an example of the article dispenser **800** according to an embodiment. FIG. **6** is a rear perspective view illustrating an example of the article dispenser **800** according to an embodiment. FIG. **7** is a sectional view illustrating an example of the article dispenser **800** according to an embodiment.

As is illustrated in FIGS. **3** and **4**, a refrigerator door **600** may include recesses **690** provided on an inner wall **610** of the door **600**. An opening of the recesses **690** may be partially defined by horizontal rails **620**. The horizontal rails **620** may be configured to allow various storage units, including the article dispenser **800**, to rest thereon via curved fasteners **920** illustrated in FIGS. **6** and **7**. The horizontal rails **620**, along with the recesses **690**, may extend across a substantial width of the inner wall **610**.

While the refrigerator door **600** illustrated in FIGS. **3** and **4** includes recesses **690** provided on the inner wall **610** of the door **600** and having an opening partially defined by horizontal rails **620**, embodiments disclosed herein are not limited thereto. For example, rows of recesses similar to those illustrated in FIG. **2** may be provided on the inner wall **610** of the door **600** for allowing various storage units, including the article dispenser **800**, to be mounted thereon via curved fasteners **920**. The rows of recesses similar to those illustrated in FIG. **2** may extend across a substantial width of the inner wall **610**.

The article dispenser **800** may include the dispensing portion **810**. The dispensing portion **810** may include a bottom wall **850** (illustrated in FIG. **6**), a step **805** elevated from the bottom wall **850**, and an article holding area including a rear wall **820**, side walls **830**, a front wall **840**, an upper opening **860**, an enclosed portion **870**, and an open portion **880**.

The dispensing portion **810** may additionally include an article dispensing area including a front edge **875** of the bottom wall **850** and a lip **890** provided on the front edge **875** of the bottom wall **850**. The article dispensing area may be provided through a lower opening **650** of the open portion **800** on which articles **640** and **700** can be held and subsequently resist force provided as a result of articles **700** or **640** falling

from the enclosed portion **870** while awaiting retrieval by a user. The lip **890** may be provided at a position in front of the front wall **840**.

The rear wall **820** may include the mounting portion **900** and the curved fasteners **920** on a back side **910** thereof, as previously indicated with respect to FIGS. **6** and **7**. As previously indicated, the curved fasteners **920** may be configured to be removably mounted to the inner wall **610** of the door **600** via the horizontal rails **620**. The curved fasteners **920** may additionally be slidably mounted on the horizontal rails **620** within the recesses **690** and may serve to slidably mount the dispensing portion **810** to the horizontal rails **620**. In other words, the curved fasteners **920** may be enabled to slide along a width of the horizontal rails **620** and recesses **690**.

The upper opening **860** may be defined by the rear wall **820**, the side walls **830**, and the front wall **840** of the dispensing portion **810**. The upper opening **860** may be configured to accept articles **700** or a vertically oriented carton **630** containing articles **640**. The bottom wall **850** may be connected to the rear wall **820** and the side walls **830**. The front wall **840** may be connected to the side walls **830**. The side walls **830** may be connected to the front wall **840**, the rear wall **820**, and the bottom wall **850**. The bottom wall **850** may be inclined by a step **805**, as is shown in FIGS. **5** and **7**, to urge articles **640** and **700** falling downward in the enclosed area **870** toward a lower opening **650** adjacent to the bottom front **1000** of the bottom wall **850** and the article dispensing area. The bottom wall **850** may be configured to inhibit articles **640** and **700** disposed at a bottom rear **1010** of the bottom wall **850** from moving to the bottom front **1000** of the bottom wall **850**.

As is illustrated in FIG. **6**, a central hook **921** may be provided at a central portion of the mounting portion **900** on the back side **910** of the rear wall **820** and the dispensing portion **810**. Further, edge hooks **922** may be provided at a top portion of the mounting portion **900** on the back side **910** of the rear wall **820** and the dispensing portion **810**. The central hook **921** and the edge hooks **922** may be configured to correspond to a location of two adjacent recesses **690** for mounting thereon.

The enclosed portion **870** may be defined by the rear wall **820**, the side walls **830**, and the front wall **840** of the dispensing portion **810**. The enclosed portion **870** may be configured to store articles **700** or a carton **630** containing articles **640**. The open portion **880** may be provided underneath the enclosed portion **870**. The open portion **880** may be defined by the rear wall **820**, the side walls **830**, and the bottom wall **850** of the dispensing portion **810**. The open portion **880** may be configured to stage articles **640** or **700** falling from the enclosed portion **870** for retrieval by a user through the lower opening **650** of the open portion **880** adjacent to the bottom front **1000** of the bottom wall **850**.

The step **805** may be connected to the rear wall **820** and adjacent portions **855** of the bottom wall **850** provided underneath the step **805**. The step **805** may be provided in a rear portion **825** of the open portion **880**. The step **805** may be configured to allow the articles **700** or **640** to rest thereon and urge the articles **700** or **640** falling from a front portion **835** of the enclosed portion **870** into a front portion **845** of the open portion **880** through the front portion **845** of the open portion **880** onto the lip **890** of the bottom wall **850** for retrieval by a user. The lip **890** may inhibit articles **700** or **640** from being urged by the step **805** from exiting the dispensing portion **810** through the lower opening **650** of the open portion **880** without being retrieved by a user.

As is shown in FIG. **7**, the step **805** may also be configured to inhibit articles **700** or **640** falling from a position above the step **805** from moving towards the open portion **880** and the article dispensing area from the bottom rear **1010** of the bottom wall **850**. The step **805** may additionally include an incline **865** facing the open portion **880** and the lip **890**. The incline **865** may be configured to urge articles falling from above the incline **865** toward the lip **890**. The area of the bottom wall **850** between the incline **865** and the lip **890** may be a curved depression **885** shaped to accommodate a shape of articles **700** or **640**.

FIGS. **3**, **4**, and **7** illustrate the article dispenser **800** as dispensing articles **640** and **700** that are similar to cylindrical beverage containers and FIGS. **1-3** illustrate the article dispenser **800** as supporting a vertically oriented carton **630** configured to support the cylindrical beverage containers **640** and **700**. However, embodiments disclosed herein are not limited thereto. For example, a variety of articles could be dispensed using the article dispenser **800**, such as, but not limited to, butter or cream cheese sticks, yogurt sticks and containers, condiment packets, cheese blocks, water bottles, concentrated orange juice containers packaged fruits or pudding, individual-serving creamer or cheese containers, and various other articles typically stored in either a fresh food compartment or freezer compartment that can be dispensed in a single unit fashion.

A number of examples have been described above. Nevertheless, it will be understood that various modifications may be made. For example, suitable results may be achieved if the described elements are combined in a different manner and/or replaced or supplemented by other elements or their equivalents. Accordingly, other implementations are within the scope of the following claims.

What is claimed is:

1. A refrigerator, comprising:

an insulated cabinet configured to preserve food;

an insulated door mounted on the insulated cabinet, the insulated door being configured to close the insulated cabinet, the insulated door comprising an inner wall; and

an article dispenser comprising a dispensing portion and a mounting portion on a back side of the dispensing portion, the dispensing portion comprising a bottom wall, an article holding area, a step, and an article dispensing area including an opening in a lower portion of the article holding area, the article holding area being configured to position like articles in first and second columns, the article dispensing area receiving a bottom one of the articles positioned in the first column and holding the received article for retrieval by a user via the opening, the step having an upper surface elevated from the bottom wall and positioned to correspond with the second column, wherein an article positioned in the first column immediately above the received article is spaced from the upper surface of the step and rests on the received article, the step maintaining a bottom of an article positioned in the second column at a height above a height of a bottom of the received article in the article dispensing area, the mounting portion removably and slidably mounting the dispensing portion to the inner wall.

2. An insulated door mounted on an insulated cabinet of a refrigerator, the insulated door comprising:

an inner wall; and

an article dispenser comprising a dispensing portion and a mounting portion on a back side of the dispensing portion, the mounting portion being mounted to recesses in the inner wall and enabling the article dispenser to slide

horizontally within the recesses, the dispensing portion comprising a bottom wall, an article holding area, a step, and an article dispensing area including an opening in a lower portion of the article holding area, the article holding area being configured to position like articles in first and second columns, the article dispensing area receiving a bottom one of the articles positioned in the first column and holding the received article for retrieval by a user via the opening, the step having an upper surface elevated from the bottom wall and positioned to correspond with the second column, the step maintaining a bottom of an article positioned in the second column at a height above a height of a bottom of the received article in the article dispensing area, the mounting portion removably mounting the dispensing portion to the inner wall.

3. The door of claim **2**, wherein an opening of each of the recesses is defined by a hole in the inner wall, a plurality of the holes extending in horizontal rows across a substantial width of the inner wall, and

wherein the mounting portion comprises one or more mounting members, the mounting members resting on portions of the inner wall corresponding with the holes defining the recesses within which the mounting members are removably mounted, the mounting members further extending past the corresponding inner wall portions into the recesses.

4. The door of claim **3**, wherein the mounting members comprise hooks.

5. The door of claim **3**, wherein a first plurality of the mounting members is removably mounted in a corresponding first plurality of the recesses along a first one of the horizontal rows, and

wherein a second plurality of the mounting members is removably mounted in a corresponding second plurality of the recesses along a second one of the horizontal rows, the second one of the horizontal rows being located adjacent to and below the first set of horizontal rows.

6. An insulated door mounted on an insulated cabinet of a refrigerator, the insulated door comprising:

an inner wall, wherein the inner wall includes recesses and an opening of each of the recesses is partially defined by a rail that, along with the recess, extends horizontally across a substantial width of the inner wall, and

an article dispenser comprising a dispensing portion and a mounting portion on a back side of the dispensing portion, the dispensing portion comprising a bottom wall, an article holding area, a step, and an article dispensing area including an opening in a lower portion of the article holding area, the article holding area being configured to position like articles in first and second columns, the article dispensing area receiving a bottom one of the articles positioned in the first column and holding the received article for retrieval by a user via the opening, the step having an upper surface elevated from the bottom wall and positioned to correspond with the second column, the step maintaining a bottom of an article positioned in the second column at a height above a height of a bottom of the received article in the article dispensing area, the mounting portion removably mounting the dispensing portion to the inner wall,

wherein the mounting portion comprises one or more mounting members, the mounting members resting and sliding on the horizontal rails corresponding with the one or more recesses within which the mounting members are removably mounted, the mounting members further extending past the corresponding horizontal rails into the recesses.

7. The door of claim **6**, wherein the mounting members comprise curved fasteners.

8. The door of claim **6**, wherein a first plurality of the mounting members is slidably and removably mounted in a first one of the recesses, and

wherein a second plurality of the mounting members is slidably and removably mounted in a second one of the recesses located below and adjacent to the first one of the recesses.

9. An article dispenser for mounting to an inner wall of a refrigerator door, the dispenser comprising:

a dispensing portion configured to store one or more articles and dispense the articles according to a user's demand the dispensing portion comprising a bottom wall, an article holding area, a step, and an article dispensing area including an opening in a lower portion of the article holding area, the article holding area being configured to position like articles in first and second columns, the article dispensing area receiving a bottom one of the articles positioned in the first column and holding the received article for retrieval by a user via the opening, the step having an upper surface elevated from the bottom wall and positioned to correspond with the second column, the step maintaining a bottom of an article positioned in the second column at a height above a height of a bottom of the received article in the article dispensing area, wherein the bottom wall defines a curved depression for receiving the article in the dispensing area; and

a mounting portion on a back side of the dispensing portion, the mounting portion removably mounting the dispensing portion to the inner wall.

10. The article dispenser of claim **9**, further comprising a lip at a front of the bottom wall for retaining the article in the dispensing area.

11. The article dispenser of claim **9**, wherein the mounting portion comprises mounting members extending from the mounting portion that correspond with locations of recesses in the inner wall and the mounting members comprise a first plurality and a second plurality of the mounting members, the first plurality of the mounting members being slidably and removably mountable in a first one of the recesses, the second plurality of the mounting members being slidably and removably mountable in a second one of the recesses located below and adjacent to the first one of the recesses.

12. The article dispenser of claim **9**, wherein the mounting portion includes mounting members that comprise a first plurality and a second plurality of mounting members, the first plurality of the mounting members being removably mountable in a corresponding first plurality of recesses that extend across a substantial width of the inner wall, the second plurality of the mounting members being removably mountable in a corresponding second plurality of recesses that extend the substantial width of the inner wall and are located adjacent and below the first plurality of recesses.

13. The article dispenser of claim **9**, wherein the step maintains a position of articles positioned in the second column while the bottom article in the first column is received by the article dispensing area and the step allows one of the articles positioned in the second column to move to the first column when a final article in the first column is received by the article dispensing area.

14. The article dispenser of claim **13**, wherein the articles in the first column are diagonally positioned with respect to the articles in the second column.

15. The article dispenser of claim **14**, wherein the articles comprise a plurality of cylindrical beverage containers.

16. The article dispenser of claim **15**, wherein the cylindrical beverage containers are separated from surfaces of the article holding area by a carton configured to hold the cylindrical beverage containers.

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